AN EROSION PREVENTION AND SEDIMENT CONTROL PLAN

FOR THE PROJECT AT:

8 College Street - Waterfront Bike Path Rehabilitation - Phase 1a

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HAS BEEN FILED WITH THE CITY OF BURLINGTON STORMWATER MANAGEMENT PROGRAM IN ACCORDANCE WITH CHAPTER 26 OF THE BURLINGTON CODE OF ORDINANCES

THIS REQUIRES THAT MEASURES BE INSTALLED OR TAKEN TO PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING WATERWAYS AND IMPACTING CITY INFRASTRUCTURE (RIGHT OF WAY AND STORMDRAINS)

FOR QUESTIONS OR TO REPORT SEDIMENT LEAVING THE SITE CALL 802-540-1748

This notice to be posted in full view at all times during earth disturbance. Additional conditions on attached.

Plan Approved by: Megan Moir Digitally signed by Megan Moir DN: cn=Megan Moir, c=US, o=City of Burlington DPW, ou=Stormwater Program, email=mmoir@burlingtonvt.gov Reason: I am approving this document Location: Burlington, VT Date: 2014.08.14 17:13:20 -04'00' Date:_____

Megan J. Moir, CPESC, CPSWQ

Burlington Department of Public Works
Stormwater Program
645 Pine Street
Burlington, VT 05401
PH: 802-540-1748 Email: mmoir@ci.burlington.vt.us

Small Project Erosion Prevention & Sediment Control Plan

This questionnaire, at a minimum, is required to accompany all zoning or building permit applications which involve 400 sq. ft. or more of land disturbance. Please also provide a site plan indicating the locations of all erosion prevention and sediment control measures (silt fence, hay bales etc).
Properties with greater than 2500 sq. ft. of total impervious surfaces, that are adding more impervious, will also be required to comply with additional long term stormwater management requirements.

1. Project Location Burlington Bike Path from approx. 200 feet south of Maple Street at Railway Lane to Penny Lane (3,395 feet).
2. Brief Project Description (i.e. house foundation, swimming pool) Phase 1(a) of the rehabilitation of the Burlington Bike Path Improvements are varied depending on location, and may include repainting, repaving, full-depth reconstruction, widening, and/or realignment.

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3. Owner Name: City of Burlington
4. Owner Mailing Address: 645 Pine Street, Suite B
5. Owner Phone: (802) 864-0123 6. Owner email: jbridges@burlingtonvt.gov
7. Contractor Name: TBD
8. Contractor Phone: TBD 9. Contractor Email: TBD
10. Estimated Project Start Date 10/6/14 Estimated End Date 11/28/14
11. Area of Land Disturbance approx. 52,708 sq. ft.
12. Total proposed (existing + new) amount of impervious: approx. 33,980 sq. ft.
13. Estimated distance in feet from disturbance to nearest:
    a. City Sidewalk or Street 0 ft b. Drainage Ditch 3 ft
    c. Catch Basin (storm drain) 0 ft d. Lake/River/Stream 22 ft
14. Site plan/sketch MUST BE ATTACHED showing the following:
    ☐ Limits of disturbance ☐ Direction of stormwater flow on site
    ☐ Location of stockpiles (if any) ☐ Location of sediment control BMP's (silt fence etc.)

EPSC QUESTIONNAIRE *(See last page for typical solutions to these questions)*

A) Nature of all site disturbances (check all that apply):

□ Underground utility trench(es) □ curb cut/driveway □ foundation ☒ cut/fill/regrading □ landscaping
☒ other See #2.

B) Do you anticipate the need for any dewatering of excavations during the construction? ☒ Yes ☐ No

- If yes, how will the pumped water be managed or filtered to prevent the discharge of dirty water?

  Section 2.2.3 of the Project-specific Soil Management Plan includes protocols for Groundwater Management. If dewatering is required, water will be collected in a frac tank or metal 55-gallon drum(s) for testing prior to reintroduction to the construction site.

*impervious = any surface off of which water runs off rather than infiltrates, including, but not limited to rooftops and paved/unpaved (gravel/packed dirt) driveways, walkways and patios

C) Will excavated soil be stockpiled on the site? ☐ Yes ☒ No

- If yes, how long will the stockpile be on site? (i.e. 1 day, 1 week) _____

  How do you propose to control erosion of the stockpile? Excess soil is proposed to be managed by direct deposit into roll-off containers for disposal at an appropriate offsite facility.

- If no, where is the ultimate disposal of excess soil? A Project-specific Soil Management Plan has been developed in conjunction with the DEC Waste Management Section.

D) How do you propose to prevent sediment from leaving the site and entering nearby city sidewalks/streets and storm drains and/or lakes, rivers and streams? (see page 4 for examples)

The Project EPSC Plan includes perimeter control measures including reinforced silt fencing, silt fence, staked and keyed-in fiber rolls, inlet protection, & stabilized construction entrances. Daily site inspection will be performed and road/travelway sweeping as necessary.

E) Do you plan to park construction vehicles on or disturb City owned property like the greenbelt area? ☒ Yes ☐ No

- If yes, tell us how you agree to repair all disturbances or damage to City owned property and provide a written approval from the City allowing construction vehicles to park on City owned property.

The rehabilitation of the Burlington Bike Path and proposed improvements in Waterfront Park are City projects managed by the Department of Parks and Recreation. All necessary inter-department approvals will be secured in advance of construction.

- If no, then please monitor all construction and visitor vehicles and advise all not to park on City owned property.

F) How do you propose to either prevent or clean sediment generated from construction vehicles and activities that becomes deposited on City streets, sidewalks, or bikepaths and how frequently this will be done.

The Project will necessarily involve disturbances to these features within the construction zone. Disturbance to City property outside the construction zone will be minimized. Daily site inspection will be performed and road/travelway sweeping as necessary.

G) Will stockpiles or disturbed soils be present and/or exposed after Nov. 1st of any construction year? ☒Yes ☐ No

- If yes, tell us how you plan to stabilize any stockpile and/or disturbed soils.

The Project will follow, at a minimum, the requirements for Winter Stabilization as outlined in the Vermont DEC Low Risk Site Handbook for Erosion Prevention and Sediment Control (2006).

Do you agree to abide by the following conditions?

☒Y ☐N Applicant will call 540-1748 or email mmoir@burlingtonvt.us at least 24 hours prior to initiating earth disturbance and submit the name and contact (cell phone and email) of the erosion control coordinator for the project

☒Y ☐N Applicant will post the notice in a visible location

☒Y ☐N I acknowledge that it is the responsibility of the owner and his/her representatives to ensure that:
- o sediment does not enter surface water bodies (streams, ditches, ponds, lakes, wetlands etc.)
- o sediment does not enter City conveyance infrastructure (catch basins, sewers etc.) and
- o All sediment must be removed from the city ROW (sidewalks and roadways) by the end of each work day.

☒Y ☐N Sediment control measures will be installed prior to the initiation of earth disturbance.

☒Y ☐N During the non-winter construction season (April 15 – November 1): After an initial 14 day period of initial disturbance, temporary or permanent stabilization (mulching, erosion control matting or tarps for stockpiles, or other approved method) of exposed areas and stockpiles will occur at the end of each work day unless:
- o Earthwork is to continue in the area within the next 24 hours and there is NO liquid precipitation forecast for the next 24 hours; or
- o If work is occurring in a self contained excavation (no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation or utility trenches.

☒Y ☐N During the winter construction period from November 1 to April 15, any new disturbance must be temporarily or permanently stabilized (mulching, erosion control matting or tarps for stockpiles, or other approved method) will occur at the end of each work day unless:

- Earthwork is to continue in the area within the next 24 hours and there is NO liquid precipitation forecast for the next 24 hours; or
- If work is occurring in a self-contained excavation (no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation or utility trenches)

☒Y ☐N The perimeter of the site and all BMPs will be inspected at the end of each workday to ensure that sediment will not leave the site. If sediment has travelled beyond the site boundary, it shall be swept up or otherwise removed and deposited on-site in an upgradient area at the end of each work day.

☒Y ☐N The owner and his/her representatives shall abide by the best management practices (BMPs) indicated in this plan and conditions and in the Vermont DEC Low Risk Site Handbook for Erosion Prevention and Sediment Control (2006). Contact 802-540-1748 for a hard copy or go to the web: http://vtwaterquality.org/stormwater/docs/construction/sw_low_risk_site_handbook.pdf

☒Y ☐N If soils will be exposed after November 1st and winter construction has not been permitted the project will notify DPW prior to October 15th. If the project is completed during the winter months, an additional inspection will be required to ensure that the site is buttoned up for the winter.

☒Y ☐N Within 48 hours of reaching final grading, the exposed soil will be seeded and mulched or covered with erosion control matting (for slopes steeper than 3:1 or high wind prone areas). Erosion control matting is preferred.

☒Y ☐N The owner will contact DPW to schedule a stabilization inspection when site work is finished and stabilization measures (seeding and mulching or matting) have been installed.

AGREEMENT

By filling out and signing this plan, I agree to abide by the terms and conditions outlined above. Failure to follow this plan can result in a stop work order by the City of Burlington, fines, or both.

By: ☒ Owner ☐ Contractor ☐ Architect/Engineer

Jen Francis, Parks Planner	Jen Francis	8/13/2014
Name	Signature	Date

Digitally signed by Jen Francis
DN: cn=Jen Francis, o=Burlington Parks, Recreation & Waterfront, ou=City of Burlington, email=jsfrancis@burlingtonvt.gov, c=US
Date: 2014.08.13 12:27:43 -04'00'

Additional Conditions of Approval:

Must obtain State CGP coverage prior to initiation of disturbance (CGP application has been filed)

Required Compliance Items:

- Notification of start/identification of EPSC responsible party
- Winter Stabilization Inspection (if applicable)
- Final Stabilization

S

TYPICAL SOLUTIONS TO PREVENT OR CONTROL SEDIMENT AND EROSION

STOCKPILES

- Cover small stockpiles with a tarp when not being used.
- Install silt fencing or other appropriate devices around the stockpiles to filter sediment.
- Cover stockpiles with straw or other approved mulching material.
- Plan to remove any unusable material as soon as possible from the site to an approved location.
- Plant grass and mulch stockpiles that will be on site for more than 14 days.
- Cover, vegetate or install erosion matting on stockpiles that will remain disturbed over the winter.

DISTURBED AREAS

- Maintain vegetated buffers around disturbed areas.
- Install silt fencing or other appropriate device to filter sediment washing off from disturbed areas. Remember that the bottom of the silt fence must be "keyed in" (dug into ground) to work correctly.
- To prevent sediment from running off your site via your driveway (or other paved areas where you can't install silt fence) use a row of hay bales or tube sand.
- Cover disturbed areas as soon as possible with straw or other approved mulching material. Use erosion control matting in high wind, traffic or slopes steeper than 3:1 (horizontal to vertical), and follow the manufacturer's guidelines staple the matting down.
- Plant grass and mulch or use erosion control matting all disturbed areas that will remained exposed for more than 14 days.
- Cover, vegetate or install erosion matting on areas that will remain disturbed over the winter.
- Protect ditches, catch basins or water bodies off-site by using silt fencing, gravel check dams or other approved sediment control methods.

CONSTRUCTION VEHICLES

- Do not park construction vehicles on City owned green space. Vehicles disturb vegetation and compact the soil, thereby reducing its ability to infiltrate stormwater. Any green belt disturbance will need to be permanently stabilized with grass seed and erosion control matting.
- Prevent sediment from leaving the project by cleaning the tires of vehicles, or use clean gravel at project access points to clean tires.
- Sweep city streets, sidewalks and bikepaths daily or as needed to remove sediment transported from the project.

RESOURCES

The Vermont Handbook for Erosion Prevention and Sediment Control at:
http://vtwaterquality.org/stormwater/docs/construction/sw_low_risk_site_handbook.pdf

The City of Burlington Stormwater Program Page at
http://www.dpw.ci.burlington.vt.us/stormwater/

The City of Burlington Conservation Board Stormwater and Erosion Control Fact sheet at
http://www.ci.burlington.vt.us/planning/cb/stormwater/management.html

CITY OF BURLINGTON

DEPARTMENT OF PARKS, RECREATION & WATERFRONT

BURLINGTON
PARKS
RECREATION
WATERFRONT

INDEX OF SHEETS

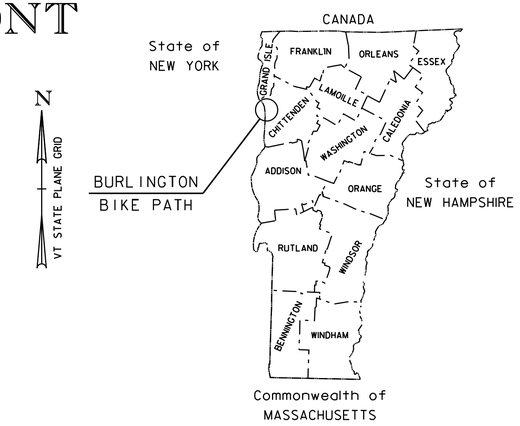
LIST OF STANDARDS

A-80	SHARED USE PATH DETAILS	03-31-2004
C-2A	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES WITH SIDEWALK ADJACENT TO CURB	10-14-2005
C-2B	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES WITH SIDEWALK AND GREEN STRIP	10-14-2005
C-3A	SIDEWALK RAMPS	03-10-2008
C-3B	SIDEWALK RAMPS AND MEDIAN ISLANDS	03-10-2008
C-10	CURBING	02-11-2008
D-4	VARIOUS DRAINAGE DETAILS	08-13-2007
E-180A	STREET LIGHTING DETAILS	08-09-1995
E-180B	STREET LIGHTING DETAILS	08-09-1995
E-195	SHARED USE PATH PAVEMENT MARKINGS AND SIGN DETAILS	06-09-2008

PROPOSED IMPROVEMENT

BURLINGTON BIKE PATH REHABILITATION PROJECT, PHASE 1A

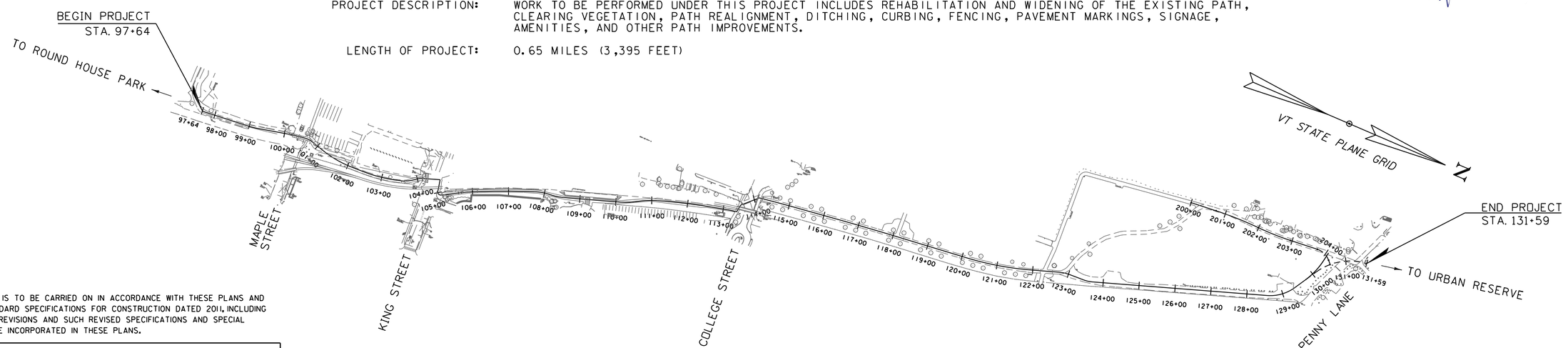
CITY OF BURLINGTON
COUNTY OF CHITTENDEN



PROJECT LOCATION: LOCATED IN THE COUNTY OF CHITTENDEN, CITY OF BURLINGTON, THE PROJECT BEGINS AT A POINT APPROX. 200 FEET SOUTH OF THE INTERSECTION OF MAPLE STREET AND RAILWAY LANE AT STATION 97+64. THE PROJECT FOLLOWS ALONG LAKE CHAMPLAIN AND EXTENDS NORTHERLY 0.65 MILES TO THE NEW ALIGNMENT OF PENNY LANE.

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES REHABILITATION AND WIDENING OF THE EXISTING PATH, CLEARING VEGETATION, PATH REALIGNMENT, DITCHING, CURBING, FENCING, PAVEMENT MARKINGS, SIGNAGE, AMENITIES, AND OTHER PATH IMPROVEMENTS.

LENGTH OF PROJECT: 0.65 MILES (3,395 FEET)



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

SCALE IN FEET
150 0 150

SURVEYED BY :	VHB ALDRICH + ELLIOT, PC BUTTON PROFESSIONAL LAND SURVEYORS, PC CROSS CONSULTING ENGINEERINGS
SURVEYED DATE :	AUGUST 2013
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (07)

STATE OF VERMONT
MARK A. COLGAN
7-25-14
NO. 8015
Structural
LICENSED
PROFESSIONAL ENGINEER

PROJECT MANAGER :	JEN FRANCIS
PROJECT NAME :	BURLINGTON BIKE PATH
PROJECT NUMBER :	57634.00
SHEET 1 OF 59 SHEETS	

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	HWY	HIGHWAY EASEMENT
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
⧈	BNDNS	BOUND TO BE SET
●	IPNS	IRON PIN SET
◎	IPNS	IRON PIN TO BE SET
⊠	CALC	EXISTING ROW POINT
○	PROW	PROPOSED ROW POINT
[LENGTH]		LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
	APL	BOUND APPARENT LOCATION
	BM	BENCH MARK
	BND	BOUND
	CB	CATCH BASIN
	COMB	COMBINATION POLE
	DITHR	DROP INLET THROATED DNC
	EL	ELECTRIC POWER POLE
	FPOLE	FLAGPOLE
	GASFIL	GAS FILLER
	GP	GUIDE POST
	GSO	GAS SHUT OFF
	GUY	GUY POLE
	GUYW	GUY WIRE
	GV	GATE VALUE
	H	TREE HARDWOOD
	HCTRL	CONTROL HORIZONTAL
	HVCTRL	CONTROL HORIZ. & VERTICAL
	HYD	HYDRANT
	IP	IRON PIN
	IPIPE	IRON PIPE
	LI	LIGHT - STREET OR YARD
	MB	MAILBOX
	MH	MANHOLE (MH)
	MM	MILE MARKER
	PM	PARKING METER
	PMK	PROJECT MARKER
	POST	POST STONE/WOOD
	RRSIG	RAILROAD SIGNAL
	RRSL	RAILROAD SWITCH LEVER
	S	TREE SOFTWOOD
	SAT	SATELLITE DISH
	SHRUB	SHRUB
	SIGN	SIGN
	STUMP	STUMP
	TEL	TELEPHONE POLE
	TIE	TIE
	TSIGN	SIGN W/DOUBLE POST
	VCTRL	CONTROL VERTICAL
	WELL	WELL
	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLOGY

UNDERGROUND UTILITIES

- UT — TELEPHONE
- UE — ELECTRIC
- UC — CABLE (TV)
- UEC — ELECTRIC+CABLE
- UET — ELECTRIC+TELEPHONE
- UCT — CABLE+TELEPHONE
- UECT — ELECTRIC+CABLE+TELEP.
- G — GAS LINE
- W — WATER LINE
- S — SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

- T — TELEPHONE
- E — ELECTRIC
- C — CABLE (TV)
- EC — ELECTRIC+CABLE
- ET — ELECTRIC+TELEPHONE
- AER E&T — ELECTRIC+TELEPHONE
- CT — CABLE+TELEPHONE
- ECT — ELECTRIC+CABLE+TELEP.
- UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOGY

- CZ — CLEAR ZONE
- PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

- TOP OF CUT SLOPE
- TOE OF FILL SLOPE
- STONE FILL
- BOTTOM OF DITCH ℄
- CULVERT PROPOSED
- STRUCTURE SUBSURFACE
- PDF — PDF — PROJECT DEMARCATION FENCE
- BF — BF — BARRIER FENCE
- TREE PROTECTION ZONE (TPZ)
- STRIPING LINE REMOVAL
- SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES

- TOWN LINE — TOWN BOUNDARY LINE
- COUNTY LINE — COUNTY BOUNDARY LINE
- STATE LINE — STATE BOUNDARY LINE
- PROPOSED STATE R.O.W. (LIMITED ACCESS)
- PROPOSED STATE R.O.W.
- STATE ROW (LIMITED ACCESS)
- STATE ROW
- TOWN ROW
- PERMANENT EASEMENT LINE (P)
- TEMPORARY EASEMENT LINE (T)
- SURVEY LINE
- P/L — PROPERTY LINE (P/L)
- SR SR SR — SLOPE RIGHTS
- 6f — 6F PROPERTY BOUNDARY
- 4f — 4F PROPERTY BOUNDARY
- HAZ — HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

- FILTER CURTAIN
- SILT FENCE
- SILT FENCE WOVEN WIRE
- CHECK DAM
- DISTURBED AREAS REQUIRING RE-VEGETATION
- EROSION MATTING

ENVIRONMENTAL RESOURCES

- WETLAND BOUNDARY
- RIPARIAN BUFFER ZONE
- WETLAND BUFFER ZONE
- SOIL TYPE BOUNDARY
- T&E — THREATENED & ENDANGERED SPECIES
- HAZ — HAZ — HAZARDOUS WASTE AREA
- AG — AGRICULTURAL LAND
- HABITAT — FISH & WILDLIFE HABITAT
- FLOOD PLAIN — FLOOD PLAIN
- OHW — ORDINARY HIGH WATER (OHW)
- STORM WATER
- USDA FOREST SERVICE LANDS
- WILDLIFE HABITAT SUIT/CONN

ARCHEOLOGICAL & HISTORIC

- ARCH — ARCHEOLOGICAL BOUNDARY
- HISTORIC DIST — HISTORIC DISTRICT BOUNDARY
- HISTORIC — HISTORIC AREA
- Ⓗ — HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

EXISTING FEATURES

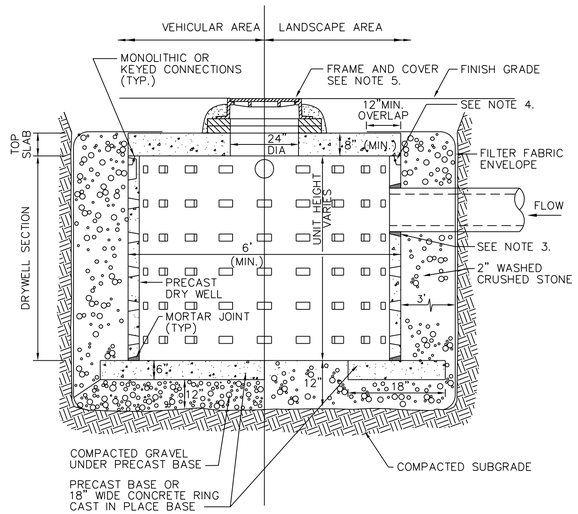
- ROAD EDGE PAVEMENT
- ROAD EDGE GRAVEL
- DRIVEWAY EDGE
- DITCH
- FOUNDATION
- FENCE (EXISTING)
- FENCE WOOD POST
- FENCE STEEL POST
- GARDEN
- ROAD GUARDRAIL
- RAILROAD TRACKS
- CULVERT (EXISTING)
- STONE WALL
- WALL
- WOOD LINE
- BRUSH LINE
- HEDGE
- BODY OF WATER EDGE
- LEDGE EXPOSED

VHB

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634

FILE NAME: z57634LegendSheet.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: VTRANS
CONVENTIONAL SYMBOLOGY LEGEND

PLOT DATE: 7/25/2014
DRAWN BY: D.A. GINGRAS
CHECKED BY: G. BAKOS
SHEET 2 OF 59



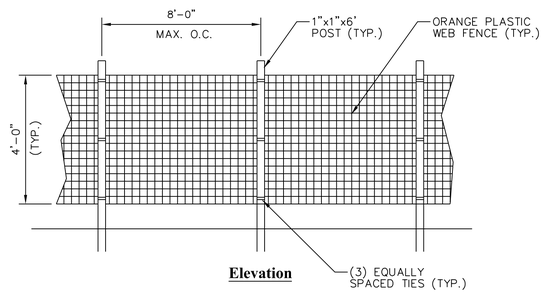
Notes:

1. BASE SECTION SHALL BE PRECAST CONCRETE WITH MORTARED JOINTS OR CAST IN PLACE.
2. ALL COMPONENTS SHALL BE DESIGNED FOR HS-20 LOADING.
3. PROVIDE PRECAST OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSE MINIMUM, 5 BRICK COURSE MAXIMUM)

Leaching Chamber

2/09

N.T.S. Source: VHB LD_180



Elevation

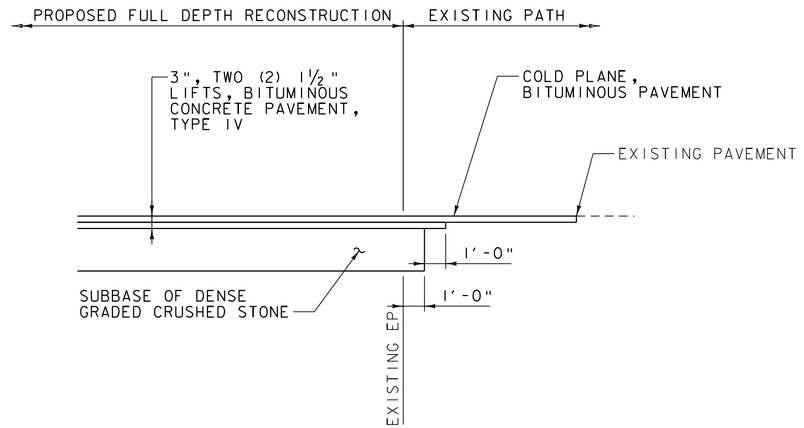
Notes:

1. INSTALL TREE PROTECTION FENCE AS SHOWN IN PLANS.

Tree Protection Fence

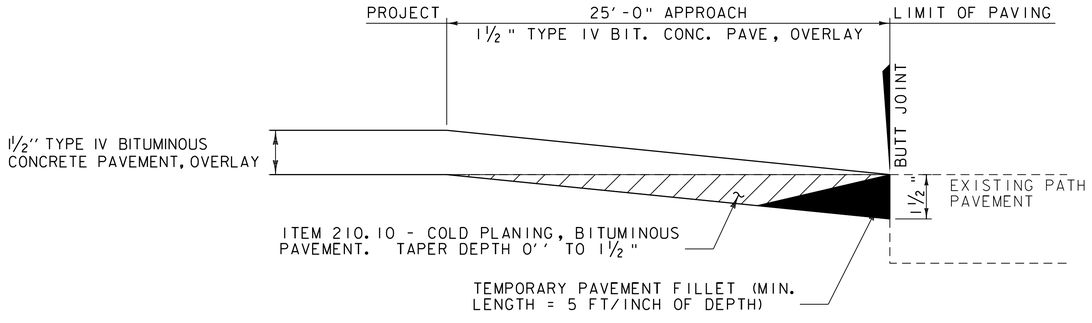
7/13

N.T.S. Source: VHB LD_610



BIKE PATH LONGITUDINAL TRANSITION

NOT TO SCALE



OVERLAY PAVEMENT MATCH TRANSITION DETAIL

NOT TO SCALE

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634det.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: E.B. PARIZO
MISCELLANEOUS DETAILS

PLOT DATE: 7/25/2014
DRAWN BY: E.B. PARIZO
CHECKED BY: M.J. SERVETAS

PROJECT NOTES

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, AND ITS LATEST REVISIONS.

2. PER ADA GUIDELINES, PATH CROSS SLOPES SHALL NOT EXCEED 2%.

3. ALL SHARED USE PATH LONGITUDINAL RAMPS AT ROADWAY AND DRIVEWAY CROSSINGS SHALL NOT EXCEED 5%.

4. ALL EXISTING PAVED SURFACES CALLED OUT FOR REMOVAL ON THE LAYOUT PLANS SHALL BE REPLACED WITH 6" OF TOPSOIL & SEED, UNLESS OTHERWISE NOTED ON THE PLANS.

5. ALL EXISTING TREES WITHIN THE PROPOSED CONSTRUCTION LIMITS SHALL BE SAVED UNLESS OTHERWISE NOTED IN THE PLANS. TREE REMOVAL SHALL BE PAID FOR UNDER THE APPROPRIATE CONTRACT ITEMS.

6. ANY WASTE MATERIAL SHALL BE REMOVED AND HAULED TO A PREVIOUSLY APPROVED FACILITY.

CONSTRUCTION

7. THE CONTRACTOR SHALL ERECT, MAINTAIN, REMOVE, AND/OR RESET AS REQUIRED ALL ON-PROJECT CONSTRUCTION SIGNS AND BARRICADES. ALL SIGNS AND BARRICADES SHALL BE INSPECTED AND REPAIRED DAILY. ALL SIGNS AND BARRICADES SHALL CONFORM TO THE LATEST VERSION OF THE MUTCD AND SHALL BE CLEANED OF DUST AND DEBRIS WEEKLY.

8. ANY EXISTING SIGNS NOT REUSED SHALL REMAIN THE PROPERTY OF THE CITY OF BURLINGTON. THESE SIGNS SHALL BE REMOVED BY THE CONTRACTOR AND STOCKPILED FOR REMOVAL BY THE CITY. STOCKPILE LOCATION TO BE DETERMINED BY THE CITY.

9. FULL ACCESS TO ALL DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES. IF FULL ACCESS CANNOT BE MAINTAINED, THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE BUSINESS OR PROPERTY OWNER AT LEAST 24 HOURS IN ADVANCE OF TEMPORARILY CLOSING OFF THE ACCESS.

10. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL BURIED AND AERIAL UTILITIES AND POLES PRIOR TO STARTING WORK. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY OWNERS TO CONFIRM ACTUAL LOCATIONS PRIOR TO CONSTRUCTION.

    DIG-SAFE (1-888-344-7233)

    CONTRACTOR SHALL COORDINATE THE ADJUSTMENT OF ANY EXISTING GATE VALVES WITH THE OWNER OF THE GAS LINES. ADJUSTMENT OF GAS VALVES SHALL BE DONE BY THE GAS COMPANY.

11. THE FOLLOWING IS A LIST OF CONTACTS THE CONTRACTOR SHALL NOTIFY AT LEAST SEVEN (7) FULL BUSINESS DAYS PRIOR TO EXCAVATING:

    CITY OF BURLINGTON:
    JESSE BRIDGES, DIRECTOR OF PARKS AND RECREATION/HARBOR MASTER;
    (802) 865-7557
    JEN FRANCIS, BURLINGTON BIKE PATH REHABILITATION PROJECT MANAGER;
    (802) 865-7248

12. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS, STATE AND LOCAL REQUIREMENTS.

13. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

14. IN THE EVENT CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE RESIDENT ENGINEER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.

15. DAMAGE RESULTING FROM CONTRACTOR CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.

16. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION AS PER THE THE EPSC PLANS AND THE ANR LOW RISK HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, ANDSHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.

UTILITY

17. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR DESIGN ENGINEER HAVE NOT INDEPENDENTLY VERIFIED ALL OF THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY. EXPLORATORY EXCAVATION SHALL BE PAID FOR UNDER ITEM 204.22 - TRENCH EXCAVATION OF EARTH, EXPLORATORY.

18. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED AND THE INFORMATION FURNISHED IN WRITING TO THE RESIDENT ENGINEER FOR THE RESOLUTION OF THE CONFLICT.

19. SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GENERAL PLANS, CROSS SECTIONS AND DRAINAGE NOTES.

20. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:

    A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
    B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
    C. LANDSCAPE, TOPSOIL AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION

21. THE USE OF BRICK AND MORTAR TO ADJUST THE ELEVATION OF DRAINAGE OR SANITARY STRUCTURES IS PROHIBITED. ALL ELEVATION ADJUSTMENTS SHALL BE MADE USING EITHER GRADE RINGS OR A SYNTHETIC RISER.

22. ALL CONNECTIONS BETWEEN PRECAST DRAINAGE STRUCTURES AND NEW DRAINAGE PIPES SHALL BE A BOOTED CONNECTION.

23. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND ADJUSTING ALL CURB STOPS, WATER VALVES, MANHOLES, & DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS TO THE FINAL GRADE ELEVATION. PAYMENT FOR ADJUSTMENTS SHALL BE PAID FOR UNDER THE APPROPRIATE CONTRACT PAY ITEMS.

TRAFFIC CONTROL

24. PLEASE SEE TRAFFIC CONTROL PLANS FOR ALL NOTES PERTAINING TO TRAFFIC CONTROL.

EROSION PREVENTION AND SEDIMENT CONTROL

25. EPSC MEASURES SHALL BE INSTALLED PURSUANT TO THE CONSTRUCTION PHASE STORMWATER DISCHARGE PERMIT FOR THE PROJECT, THE EPSC PLAN, THE VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL (2006, AMENDED 2008), THE LOW RISK SITE HANDBOOK, AND OTHER RELEVANT PROJECT PERMITS.

26. PROJECT CONSTRUCTED SHALL BE INSPECTED PER SECTION 2.12 OF THE LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL.

27. CONSTRUCTION DEMARCATION AND PERIMETER CONTROLS SHALL COMPLY WITH THE FOLLOWING:

    CONSTRUCTION DEMARCATION:

    A. CONSTRUCTION DEMARCATION TO BE INSTALLED ALONG PERIMETER OF LIMITS OF DISTURBANCE PER THE EPSC PLAN.
    B. DEMARCATION IS NOT TO CROSS ACTIVE ACCESS ROUTES.
    C. WITHIN 50 FEET OF A WATER RESOURCE AREA, DEMARCATION MUST INCLUDE:
        i. 2 TO 3 ROWS OF STAKED, STAPLED, OR TIED 3-INCH ORANGE BARRIER MESH TAPE,
        ii. ORANGE CONSTRUCTION FENCE, OR
        iii. ORANGE SNOW FENCE.
    D. GREATER THAN 50 FEET FROM A WATER RESOURCE AREA, DEMARCATION MAY INCLUDE:
        i. ONE ROW OF STAKED (OR STAPLED) 3 INCH ORANGE BARRIER MESH TAPE, OR
        ii. ORANGE FLAGGING.

    PERIMETER CONTROLS:

    A. PERIMETER CONTROLS ARE TO BE INSTALLED ON THE DOWNSLOPE SIDE OF AREAS OF DISTURBANCE WHERE THERE IS POTENTIAL FOR SEDIMENT RUNOFF AND/OR SOIL EROSION.
    B. PERIMETER CONTROLS ARE NOT TO CROSS ACTIVE ACCESS ROUTES OR PERENNIAL FLOW PATHS (E.G., A STREAM).
    C. WITHIN 50 FEET OF A WATER RESOURCE AREA, PERIMETER CONTROLS MUST INCLUDE:
        i. REINFORCED SILT FENCE - TO BE REINFORCED WITH WIRE MESH, STAKED HAYBALES, STAKED FIBER ROLLS.
    D. GREATER THAN 50 FEET FROM A WATER RESOURCE AREA, PERIMETER CONTROLS MAY INCLUDE:
        i. SILT FENCE (NON-REINFORCED)
        ii. STAKED AND KEYED-IN FIBER ROLLS
    E. PERIMETER CONTROL MAY EXTEND BEYOND THE LIMITS OF DISTURBANCE IN THE CASE OF A DOWN-GRADIENT BASIN.

28. PROJECT DEMARCATION OF AN AREA SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES WITHIN THAT AREA. AN EXCEPTION IS LAND DISTURBANCE THAT MAY BE NEEDED TO ACCESS THE AREA WITH EQUIPMENT IN ORDER TO INSTALL EPSC MEASURES.

29. ANY STONE AND/OR GEOTEXTILE FABRIC THAT IS USED TO PROVIDE A STABILIZED SURFACE IN ACCESS ROUTES, LAYDOWN/STAGING AREAS, WORK SPACES, ETC., DURING CONSTRUCTION MUST BE REMOVED AND ANY EXPOSED SOIL STABILIZED ONCE AREAS ARE NO LONGER NEEDED.

30. STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED REGULARLY TO CONTROL EQUIPMENT AND VEHICLES FROM TRACKING MATERIAL OFF SITE AND ONTO ROADWAYS.

31. INSPECT ROADWAYS DAILY AND CONDUCT ROUTINE SWEEPING OF ROADWAYS AS NEEDED AND DIRECTED.

32. IN ADVANCE OF FORECASTED RAINFALL OR SNOWMELT, EPSC MEASURES SHALL BE INSPECTED AND REPAIRED, AS NEEDED.

33. TO THE EXTENT PRACTICABLE, SURFACE FLOW SHALL BE DIVERTED AWAY FROM EXPOSED SOILS.

34. DUST CONTROL SHALL BE HANDLED VIA WATER OR CALCIUM CHLORIDE APPLICATION TO ROADWAYS AND OTHER AREAS WHERE DUST MAY BE GENERATED.

35. DURING REGULAR CONSTRUCTION SEASON (APRIL 15 TO OCTOBER 15), ALL AREAS OF EARTH DISTURBANCE MUST BE STABILIZED WITHIN 7 DAYS OF INITIAL DISTURBANCE. AFTER THIS INITIAL 7-DAY PERIOD, ALL EARTH DISTURBANCE AREAS MUST BE STABILIZED BY THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
    A. WORK IS TO CONTINUE IN THAT AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
    B. WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E., NO OUTLET FOR STORMWATER) WITH A DEPTH OF 2 FEET OR GREATER (E.G., UNDERGROUND LINE INSTALLATION).

36. DURING WINTER CONSTRUCTION SEASON (OCTOBER 15 TO APRIL 15), ALL AREAS OF EARTH DISTURBANCE MUST BE STABILIZED BY THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
    A. WORK IS TO CONTINUE IN THAT AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
    B. WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E., NO OUTLET FOR STORMWATER) WITH A DEPTH OF 2 FEET OR GREATER (E.G., UNDERGROUND LINE INSTALLATION).

37. TEMPORARY STABILIZATION OF EXPOSED SOILS SHALL GENERALLY BE ACHIEVED BY MULCH (E.G., HAY/STRAW, COMPOST, WOOD CHIPS, WOOD STUMP GRINDINGS, AND/OR EROSION CONTROL MIX), SEED AND MULCH, AND/OR HYDROSEEDING WITH MULCH TACKIFIER TO PROVIDE COMPLETE COVER AT LEAST UNTIL PERMANENT STABILIZATION.

38. PERMANENT STABILIZATION OF EXPOSED SOILS SHALL BE ACHIEVED BY 70% VEGETATIVE COVER, STONE, ASPHALT, BEDROCK, OR OTHER PERMANENT MATERIAL (E.G., WOOD CHIPS) THAT PROVIDES COMPLETE COVER.

39. ALL TEMPORARY EPSC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY EPSC MEASURES ARE NO LONGER NEEDED.

VT STATE PLANE GRID

N

N/F
FORMERLY ROBINSON FUELS INC.
BK 210, PG 750

N/F
CITY OF BURLINGTON
BK 174 PG 151

N/F
LAKE CHAMPLAIN
TRANSPORTATION CO.
BK 129 PG 394

N/F
STATE OF VERMONT
BK 168 PG 566

RAILWAY LANE

MAPLE STREET

PROJECT DEMARCATION FENCE

SILT FENCE

PROJECT DEMARCATION FENCE

TIE PROJECT DEMARCATION FENCE INTO EXISTING CHAIN LINK FENCE

MATCHLINE STA. 102+75

SCALE 1" = 20'-0"
20 0 20

NOTE:
1. SEE SHEET 2 FOR EPSC LAYOUT SYMBOLOGY LEGEND.

PROJECT NAME:	BURLINGTON BIKE PATH
PROJECT NUMBER:	57634.00
FILE NAME: z57634bdr_ero.dgn	PLOT DATE: 7/25/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: D.A. GINGRAS
DESIGNED BY: D.A. GINGRAS	CHECKED BY: M.A. COLGAN
EPSC CONSTRUCT. CONDITIONS PLAN (1 OF 6)	SHEET 51 OF 59

VHB


VT STATE PLANE GRID
N
LAKE CHAMPLAIN
WOOD DOCK
METAL SHEET PILING
N/F
LAKE CHAMPLAIN TRANSPORTATION CO.
BK 129 PG 394
GRAVEL PARKING AREA
CONCRETE CURB STOP (TYP)
FLOOD PLAIN
WOOD GUARD RAIL
SIGN POST
FERRY FEE STATION
NEWER PAVEMENT PATCH. APPARENT LOCATION OF OUT PIPE. NOT VISIBLE IN LAKE
R=99.97' STANDING WATER AT ELEV 99.67 NO PIPES VISABLE
VEHICLE LANE FOR ENTERING FERRY STAGING AREA
N/F
LAKE CHAMPLAIN TRANSPORTATION CO.
BK 391 PG 539
MATCHLINE STA. 102+75
AT&T MARKER W/PAINT UG FIBER OPTIC CABLE
SIGN "BIKE CROSSING"
SIGN "NO STOP ON TRACKS"
WOOD POST W/CABLE
FOOTPRINT OF 76" ASH
BITUMINOUS BIKE PATH
CHAIN LINK FENCE
103+00
104+00
105+00
106+00
107+00
108+00
109+00
DOUBLE SIGN "STOP" "RR "X-ING" ELEC. RISER
GAS GATE VALVE
RAILROAD TRACKS
R=104.29' 15"RCP (P50)
TIMBER RAIL
STOP LINE (TYP)
CONCRETE VAULT WITH MANHOLE FOR RAILROAD SIGNALS
SIGN "STOP"
WOOD GUARD RAIL
CONCRETE WALL
METAL FENCE
GRAN. BENCH
6" LOCUS
CONCRETE WALK
F.F.E.=105.89'
BUILDING
PAVED AREA
BIKE SHOP RENTALS
BIKE AIR FILL
STAIRS
CONC. WALK
TREE
SIGN "CYCLE THE CITY"
CONC. CURB
R=103.21' INVERTS UNKNOWN
2' WIDE YELLOW WARNING SURFACE
BUILDING CANOPY
CONCRETE WALK
MATCHLINE STA. 109+25
TIE PROJECT DEMARCATION FENCE INTO EXISTING CHAIN LINK FENCE
STATE OF VERMONT
BK 168 PG 566
PRIVATE GRAVEL PARKING AREA
SIGN "NO STOP ON TRACKS"
WATER GATE VALVE (TYP)
SIGN "MAIN ST. LANDING"
SPEED HUMP
STOCKADE FENCE
GRANITE BND FOUND
R=104.05' STANDING WATER AT 3'± NO PIPES VISABLE
KING STREET
CONCRETE WALK
GRAVEL PATH
SIGN "CITY OF BURLINGTON 25 MPH UNLESS OTHERWISE POSTED"
WOOD STEPS TO BUILDING
SIGN POST
N/F
MAIN STREET LANDING COMPANY
BK 302 PG 576

SCALE 1" = 20'-0"

20 0 20

PROJECT NAME:	BURLINGTON BIKE PATH
PROJECT NUMBER:	57634.00

VHB

FILE NAME:	z57634bdr_ero.dgn	PLOT DATE:	7/25/2014
PROJECT LEADER:	M.A. COLGAN	DRAWN BY:	D.A. GINGRAS
DESIGNED BY:	D.A. GINGRAS	CHECKED BY:	M.A. COLGAN
EPSC CONSTRUCT. CONDITIONS PLAN (2 OF 6)		SHEET	52 OF 59

VT STATE PLANE GRID

N

N/F
CITY OF BURLINGTON
BK 420 PG 322

N/F
STATE OF VERMONT
BK 168 PG 566

N/F
MAIN STREET LANDING COMPANY
BK 302 PG 576

COLLEGE STREET

MATCHLINE STA. 109+25

MATCHLINE STA. 115+25

TREE PROTECTION FENCE

INLET PROTECTION

NOTE:

1. ALL TREE ROOTS FROM STA. 114+50 TO 121+75 WITHIN 2' OF PATH'S EDGE SHALL UNDERGO APPROPRIATE ROOT PRUNING MEASURES ACCORDING TO ITEM 900.645, "SPECIAL PROVISION (ROOT PRUNING)" PRIOR TO CONSTRUCTION.

SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	BURLINGTON BIKE PATH
PROJECT NUMBER:	57634.00
FILE NAME: z57634bdr_ero.dgn	PLOT DATE: 7/25/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: D.A. GINGRAS
DESIGNED BY: D.A. GINGRAS	CHECKED BY: M.A. COLGAN
EPSC CONSTRUCT. CONDITIONS PLAN (3 OF 6)	SHEET 53 OF 59

VHB

VT STATE PLANE GRID

N

Y VAULT

N/F
CITY OF BURLINGTON
BK 420 PG 322

TREE PROTECTION FENCE

MATCHLINE STA. 115+25

116+00

117+00

118+00

119+00

120+00

121

MATCHLINE STA. 121+00

LANDSCAPE AREA

CONCRETE WALK

LANDSCAPE AREA

BITUMINOUS BIKE PATH

CONCRETE

BITUMINOUS BIKE PATH

EOP

14" ASP

16" ASP

18" ASP

20" ASP

×104.8'

×104.7'

×104.5'

×104.6'

×104.4'

METAL FENCE

(P12)

(P13)

(P14)

(P15)

(P16)

(P54)

(P55)

R=103.02'
I=98.6' 15"RCP (P12)
I=98.6' 15"RCP (P13)

R=103.11'
INVERTS UNKNOWN

R=102.74'
I=97.9' 15"RCP (P15)
I=97.7' 24"RCP (P14)
I=97.4' 15"RCP (P16)

R=102.74'
I=97.9' 15"RCP (P16)
I=98.0' 15"RCP (P54)

R=103.04'
I=98.5' 18"CPP (P55)
I=97.6' 15"RCP (P54)

R=103.04'
I=99.4' 18"CPP (P55)

INLET PROTECTION

INLET PROTECTION

INLET PROTECTION

SCALE 1" = 20'-0"
20 0 20

NOTE:

1. ALL TREE ROOTS FROM STA. 114+50 TO 121+75 WITHIN 2' OF PATH'S EDGE SHALL UNDERGO APPROPRIATE ROOT PRUNING MEASURES ACCORDING TO ITEM 900.645, "SPECIAL PROVISION (ROOT PRUNING)" PRIOR TO CONSTRUCTION.

PROJECT NAME:	BURLINGTON BIKE PATH
PROJECT NUMBER:	57634.00
FILE NAME: z57634bdr_ero.dgn	PLOT DATE: 7/25/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: D.A. GINGRAS
DESIGNED BY: D.A. GINGRAS	CHECKED BY: M.A. COLGAN
EPSC CONSTRUCT. CONDITIONS PLAN (4 OF 6)	SHEET 54 OF 59

VHB

VT STATE PLANE GRID

N

LAKE CHAMPLAIN

LAKE CHAMPLAIN

FLOOD PLAIN

RIP-RAP

CONCRETE WALK

PARK BENCH

SPRINKLER

WATER IRRIGATION SYSTEM WITH SPRINKLERS

R=103.67'
I=98.6' 12"RCP (P20)
I=98.2' 12"RCP (P21)

INVERT BURIED IN SLOPE

200+00

MATCHLINE STA. 200+75

ELECTRICAL METER ON CONCRETE PAD

4" PVC

BENCHES

MOWED GRASS AREA

N/F
CITY OF BURLINGTON
BK 420 PG 322

BITUMINOUS BIKE PATH

14" ASP

12" ASP

INLET PROTECTION

R=102.54'
I=100.2' 12"RCP
I=100.2' 12"RCP
I=100.2' 18"RCP

PROJECT DEMARCATION FENCE

GRAN. POST

WOOD DECK BOARDWALK

VGC

R=104.24'
I=98.4' 24"RCP (P17)
I=98.4' 24"RCP (P18)

STONE MONUMENT

CONCRETE WALK

8" ASP

2" CRAB

6" VC

R=103.55'
I=98.6' 24"RCP (P18)
I=98.6' 24"RCP (P19)

MATCHLINE STA. 121+00

121+00

122+00

123+00

124+00

125+00

126+00

127

MATCHLINE STA. 127+00

LANDSCAPE AREA

CONCRETE PAD

SIGN "DOG LEASH"

RAILROAD CONTROL BOX

METAL FENCE

GRAVEL

2'x3' ROCK (TYP)

R=102.52'
I=96.2' 8"RCP (P22)
I=97.2' 8"RCP (P23)

NOTE:

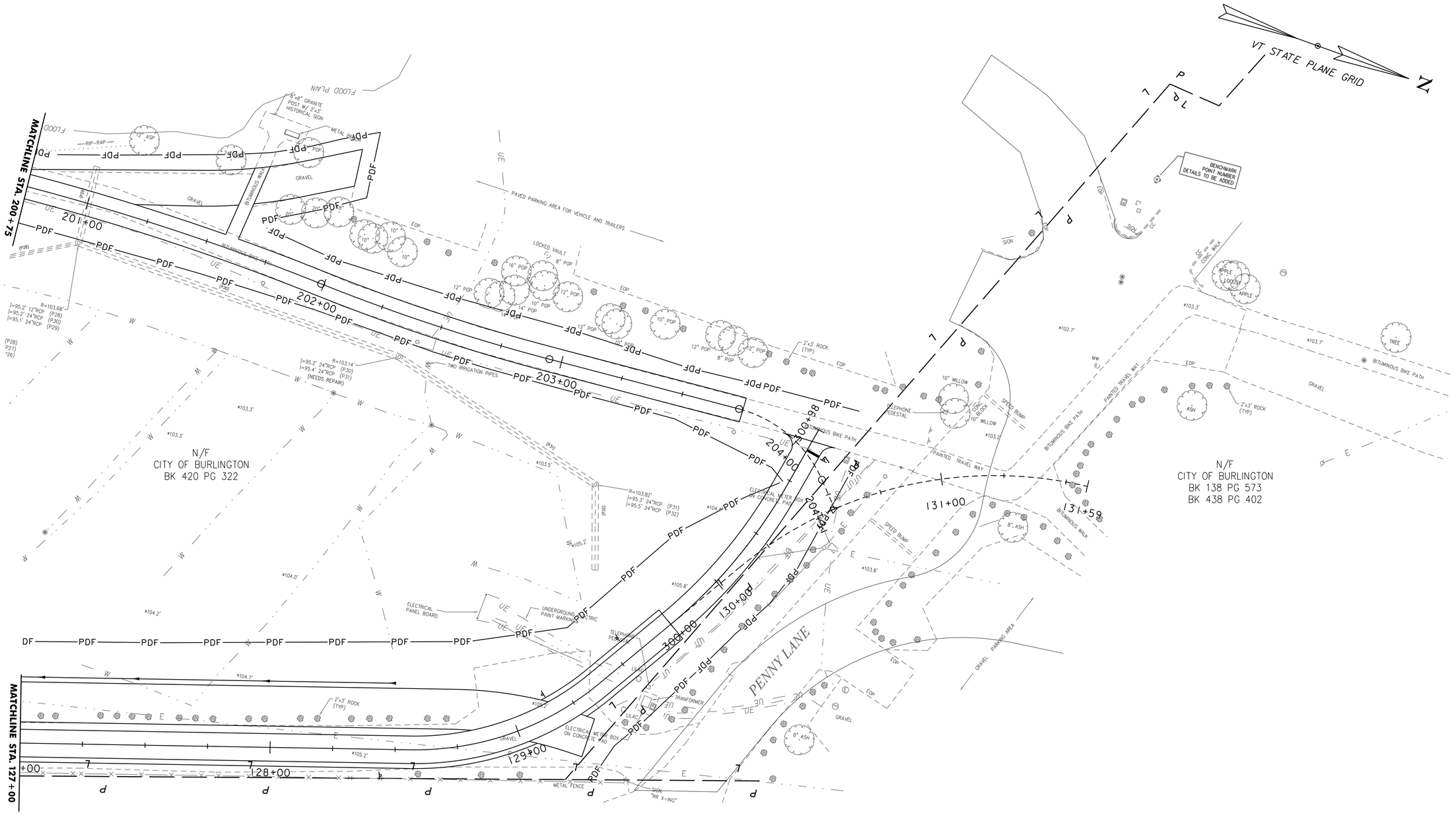
1. ALL TREE ROOTS FROM STA. 114+50 TO 121+75 WITHIN 2' OF PATH'S EDGE SHALL UNDERGO APPROPRIATE ROOT PRUNING MEASURES ACCORDING TO ITEM 900.645, "SPECIAL PROVISION (ROOT PRUNING)" PRIOR TO CONSTRUCTION.

SCALE 1" = 20'-0"

20 0 20

VHB

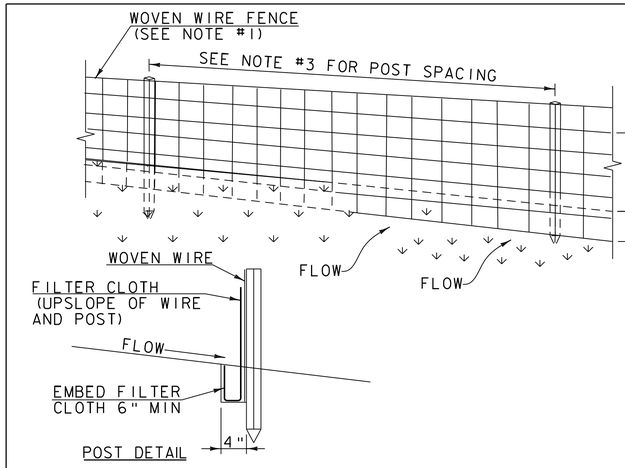
PROJECT NAME:	BURLINGTON BIKE PATH
PROJECT NUMBER:	57634.00
FILE NAME: z57634bdr_ero.dgn	PLOT DATE: 7/25/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: D.A. GINGRAS
DESIGNED BY: D.A. GINGRAS	CHECKED BY: M.A. COLGAN
EPSC CONSTRUCT. CONDITIONS PLAN (5 OF 6)	SHEET 55 OF 59



SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	BURLINGTON BIKE PATH
PROJECT NUMBER:	57634.00
FILE NAME: z57634bdr_ero.dgn	PLOT DATE: 7/25/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: D.A. GINGRAS
DESIGNED BY: D.A. GINGRAS	CHECKED BY: M.A. COLGAN
EPSC CONSTRUCT. CONDITIONS PLAN (6 OF 6)	SHEET 56 OF 59

VHB



SYMBOL

SILT FENCE

SILT FENCE WOVEN WIRE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

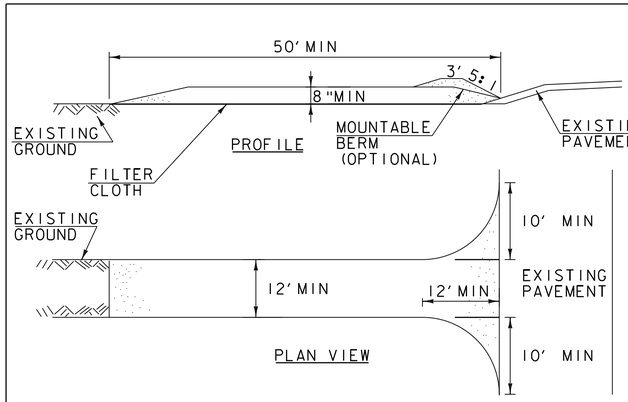
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STABILIZED CONSTRUCTION ENTRANCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF

VAOT RURAL AREA MIX

	LBS/AC				
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
37.5%	22.5	45	CREEPING RED FESCUE	85%	98%
37.5%	22.5	45	TALL FESCUE	90%	95%
5.0%	3	6	RED TOP	90%	95%
15.0%	9	18	BIRDSFOOT TREFOIL	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	85%	95%
100%	60	120			

VAOT URBAN AREA MIX

	LBS/AC				
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
42.5%	34	68	CREEPING RED FESCUE	85%	98%
10.0%	8	16	PERENNIAL RYE GRASS	90%	95%
42.5%	34	68	KENTUCKY BLUE GRASS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	85%	95%
100%	80	160			

SOIL AMENDMENT GUIDANCE

FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	*FOLLOW*	PELLETIZED	*FOLLOW*
1000 ~~X~~ LBS/AC	*MANUFACTURER*	X TONS/AC (4)	*MANUFACTURER*

CONSTRUCTION GUIDANCE

1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
7. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
8. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

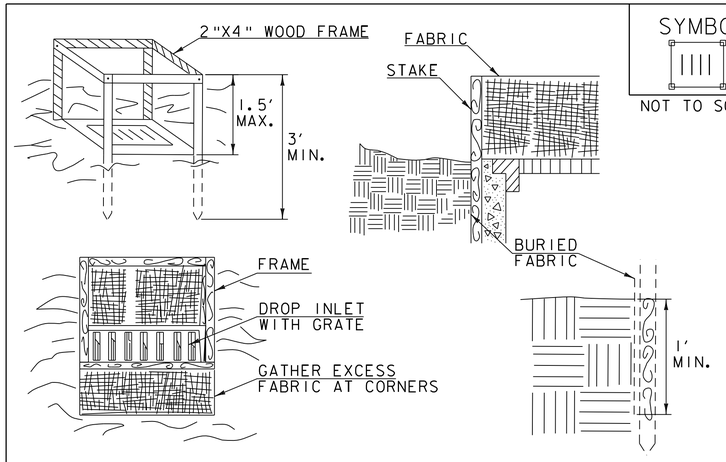
TURF ESTABLISHMENT

REVISIONS	
JUNE 23, 2009	WHF
JANUARY 15, 2010	WHF
FEBRUARY 16, 2011	WHF

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634ero_details.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: VTRANS
EPSC DETAILS (1 OF 3)

PLOT DATE: 7/25/2014
DRAWN BY: D.A. GINGRAS
CHECKED BY: M.A. COLGAN
SHEET 57 OF 59



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN APPARENT OPENING SIZE OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2"x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3'.
4. SPACE STAKES EVENLY AROUND INLET 3' APART AND DRIVE A MINIMUM 18" DEEP. SPANS GREATER THAN 3' MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1' MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
7. MAXIMUM DRAINAGE AREA 1 ACRE

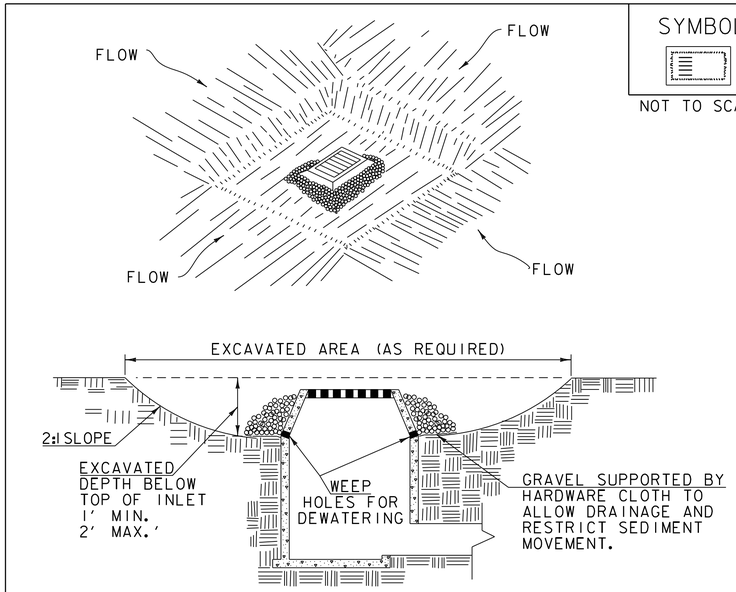
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FILTER FABRIC DROP INLET PROTECTION

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

REVISIONS	
MARCH 7, 2008	WHF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.
5. MAXIMUM DRAINAGE AREA 1 ACRE

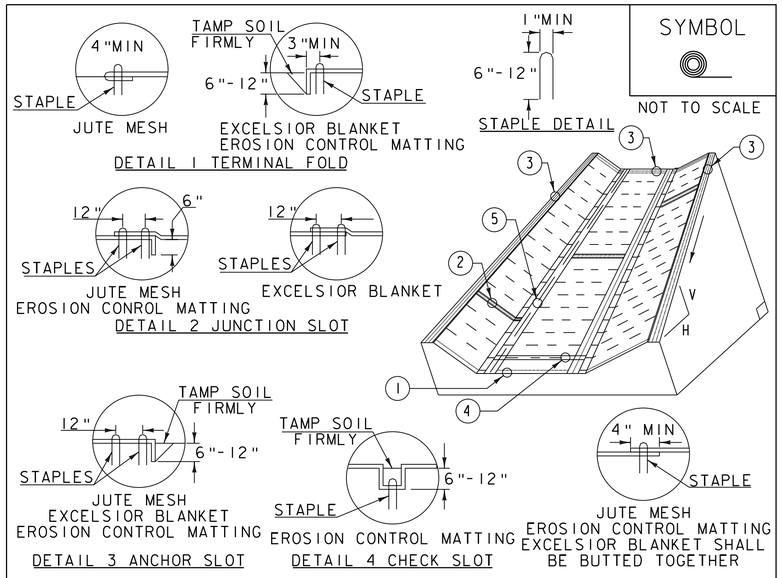
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

EXCAVATED DROP INLET PROTECTION

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. EROSION MATTING, CHECK SLOTS, SHALL BE SPACED IN DITCH CHANNEL SO THAT ONE OCCURS WITHIN EACH 50' ON SLOPES OF MORE THAN 4% AND LESS THAN 6%. ON SLOPES OF 6% OR MORE, THEY SHALL BE SPACED SO THAT ONE OCCURS WITHIN EACH 25'.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROLLED EROSION CONTROL PRODUCT (RECP) DITCH

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

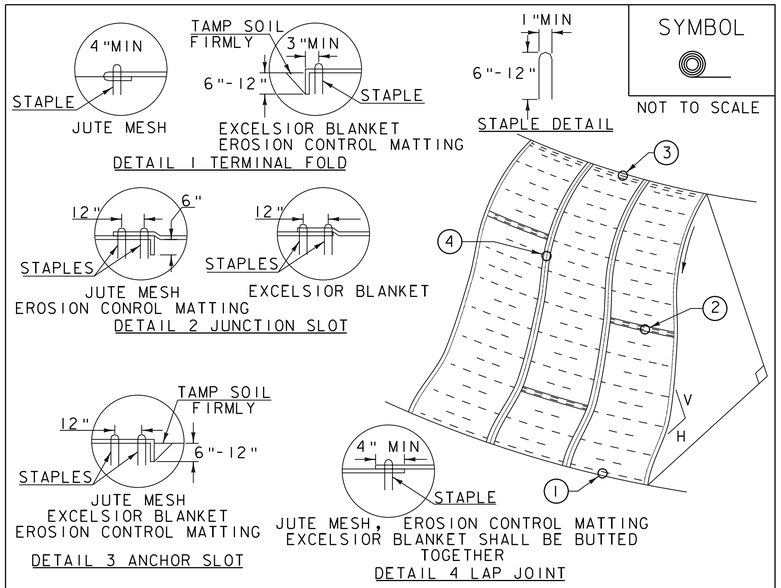
REVISIONS	
MARCH 8, 2007	JMF
APRIL 16, 2007	WHF
JANUARY 13, 2009	WHF

VHB

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634ero_details.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: VTRANS
EPSC DETAILS (2 OF 3)

PLOT DATE: 7/25/2014
DRAWN BY: D.A. GINGRAS
CHECKED BY: M.A. COLGAN
SHEET 58 OF 59



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

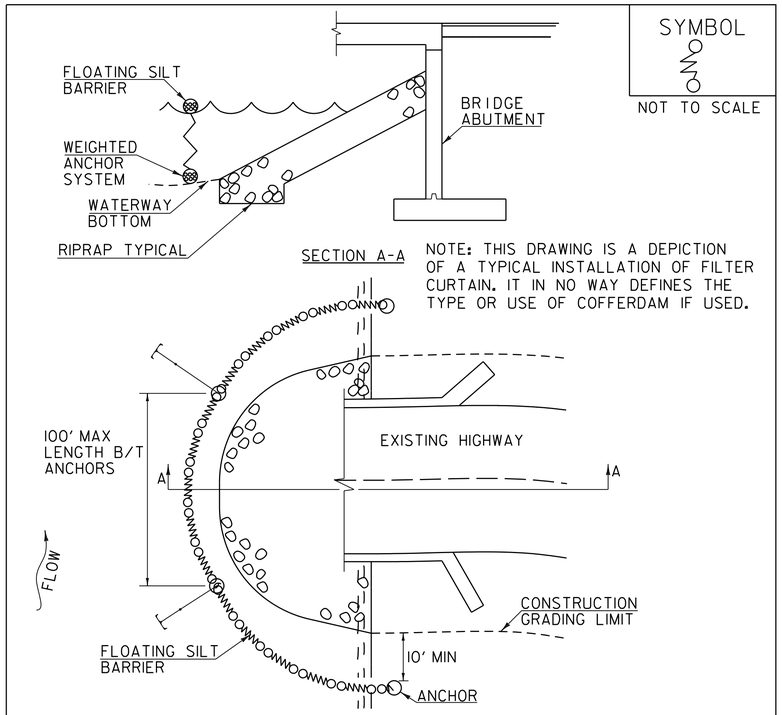
1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

NOTE: THIS DRAWING IS A DEPICTION OF A TYPICAL INSTALLATION OF FILTER CURTAIN. IT IN NO WAY DEFINES THE TYPE OR USE OF COFFERDAM IF USED.

CONSTRUCTION SPECIFICATIONS

1. FILTER CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FEET/SECOND.
2. MAXIMUM 100' LENGTH BETWEEN ANCHORS.
3. LAST SECTION SHALL TERMINATE A MINIMUM OF 10' BEYOND LIMIT OF DISTURBANCE.
4. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE WHICH ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY.
5. THE CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE MINIMIZING THE ESCAPE OF SEDIMENTS INTO WATERWAY.

FILTER CURTAIN

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.61).

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF
SEPTEMBER 4, 2009	WHF

PROJECT NAME: BURLINGTON BIKE PATH
PROJECT NUMBER: 57634.00

FILE NAME: z57634ero_details.dgn
PROJECT LEADER: M.A. COLGAN
DESIGNED BY: VTRANS
EPSC DETAILS (3 OF 3)

PLOT DATE: 7/25/2014
DRAWN BY: D.A. GINGRAS
CHECKED BY: M.A. COLGAN
SHEET 59 OF 59